SUSTAINABILITY

What is Sustainability?

In simple terms sustainability is about providing for our needs without compromising the abilities of future generations of meeting their needs. In essence this is a lifestyle which can be sustained for the foreseeable future. Currently, we are not living this way, and the problem continues to deepen, which carries risks.

Sustainable Development Development that meets the needs of the present without compromising the ability of future generations to meet their needs.

AN EXAMPLE

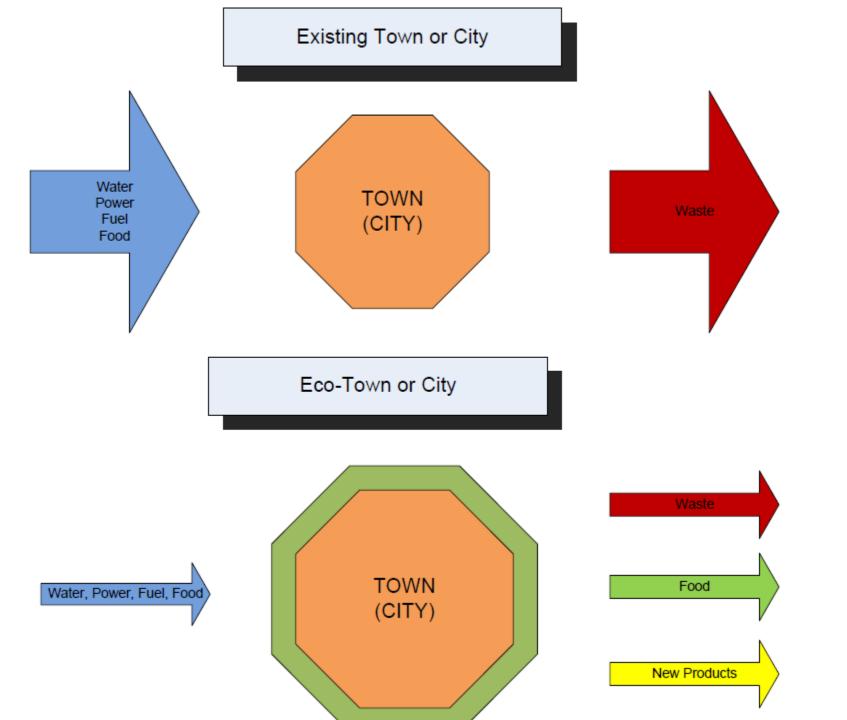
Joe Eades (Joe.Eades@Ispahan.com), Managing Director – Ispahan Engineering Pte Ltd, 70 Neil Road, Singapore 088837 (Formally known as Process Design and Commissioning Services Pte Ltd) and Vice Chairman – IChemE (Institution of Chemical Engineers) in Singapore.

Presented to PAM (Pertubuhan Akitek Malaysia) at Fakulti Alam Bina, Universiti Malaya 18th July 2009

Ecotowns for Asia – An Application of Sustainable Technology

An affordable sustainable town can now be built that will recycle its own water, grow its basic food needs, generate its own power, and manage all the forms of waste. It will also recover energy from the waste, generate compost (fertilizer) for the agri/aquaculture, thus reducing the need for eco-toxic fertilizers. A sustainable town would also centralize general utility requirements, which would drastically reduce the pressure on centralised resources such as electricity, water and fuel.

This needs to be implemented in a way that is also socially sustainable and has a sense of place.



World goals

Halve Extreme Poverty Reduce <5 mortality by 2/3

Reverse spread of diseases, esp. HIV/AIDS, Malaria

Universal Primary Education

Millenium Developmen t Goals by 2015

Ensure Environmental Sustainability

Empowerment of Women/ gender equality

Reduce maternal mortality by 3/4 Form a
Global
Development
Partnership
for aid, trade, debt relief

2002 The World Summit on Sustainable Development...

27% coral reefs Seriously threatened (up from 10%)

2.8 billion living on < \$2/day)

1.1 billion lack clean water

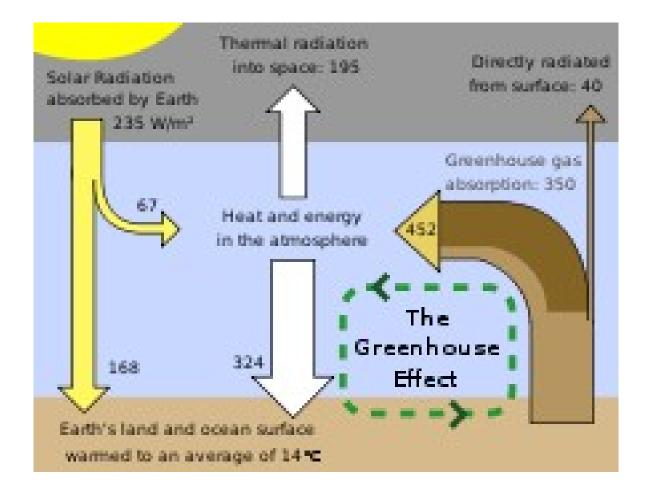
10 years after Rio Declining indicators

Extinctions on the rise

6 million children died from hunger In 10 years

Greenhouse gas emissions up 9%

Growing gap between rich & poor



A schematic representation of the exchanges of energy between outer space, the Earth's atmosphere, and the Earth's surface. The ability of the atmosphere to capture and recycle energy emitted by the Earth surface is the defining characteristic of the greenhouse effect.

The Decade of Education for Sustainable Development 2005-2014



Approved by UN Gen. Assy. 2002

UNESCO: appointed lead UN agency

"Our biggest challenge in this new century is to take an idea that seems abstract -- sustainable development -- and turn it into a reality for all the world's people."

Vof Annon LINICC 2001

1. Promotion and improvement of basic education;



2. Reorienting existing education at all levels to address sustainable development;

Action Areas

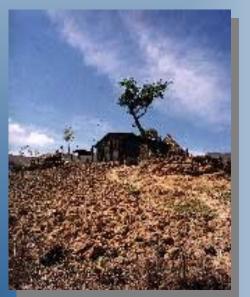
3. Developing public understanding and awareness of sustainability;

4. Training the workforce with knowledge and skills to perform their work in a sustainable



Key Themes...





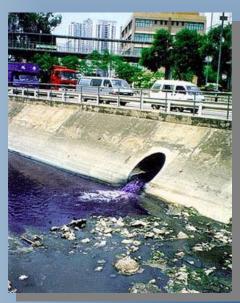
Sustainable Production & Consumption

Fresh Water Management

Biodiversity

Conservation & Protection







Key Themes (cont'd)...



Health Promotion

Human Rights



Peace & Int'l Understanding

Imp. of Info . & Comm. Technology for ESD



Gender Equality Poverty Alleviation





National Initiatives

US Partnership for the DESD

Japan Council on the DESD

German National Committee for the DESD

Others forming: Portugal, Greece, Sweden, the Philippines, India, etc.



US Partnership for the Decade

VISION:

Education for Sustainable Development integrated into education and learning in the U.S.

MISSION:

Leverage the UN Decade to foster Education for Sustainable Development in the U.S.



US Partnership for the Decade

...all sectors – higher education, K-12, business, faith communities, non-profits, government

...a community-builder, convener, catalyst and communicator for the Decade in the United States

www.uspartnership. orq



US Partnership for the Decade

"<u>Business</u> Innovation for Sustainability" (October '04)

Living Institutions –
"Today, Tomorrow,
Forever: The Role Living
Institutions Can Play in
DESD"

Conferenc

ember '04)

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Sustainability and Higher Education
Conference - "Defining the Vision"
(October '04)

Nat'l Assn. of
Independent Schools –

"Education for Sustainability:
How Far Will You Go?"

(February '05)



The Sustainability "Stool"



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Examples of Spiritual Principles related to sustainability

Economic

Social

Environmental

Elimination of extremes of wealth and poverty

Work as worship

Moderation

Be content w/little

Voluntary giving

Equality of women and men

Elimination of all forms of prejudice

Unity in diversity

Universal compulsory education

Trustworthiness

Interdependence of all life

Nature a reflection of the Divine

Humility – Earth source of all our wealth

Unity in diversity

Cleanliness

Kindness to

Profit sharing

Soloist vs. Thinker

Whole Systems

Can identify one part of a system

OR sees no connection between the parts of the system

OR
lives life through
a
"zoom lens"
without
benefit of a
"wide angle"

Makes choices and decisions and takes actions that maximize the health of the whole system upon which the specific parts depend. Able to work well diverse groups which enable them to recognize <u>interdependencies</u>

"wide angle"
Adapter from material from the Sustainability Education Septem New York

Some areas for combining principles of sustainable development and systems thinking

Personal Consumption patterns
Water & Energy use
Clothing purchases
Recreation/hobbies Yard care, landscaping Household Cleaning products Home purchase Vacation planning Family planning Transportation choices

Business
Production methods
Energy and water use
Waste disposal
Employee benefits
Stockholder relations

Community
Building a Bahá'í center
Organizing a Bahá'í Feast
Running a Bahá'í
summer school
Conference planning
Devotional program

